SEPTEMBER 2014

ADVANCING ANIMAL DISEASE TRACEABILITY ROAD MAP FOR THE STATE OF MICHIGAN

A Three-Year Plan

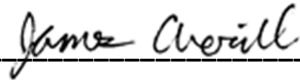**Submitted by:**

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EXECUTIVE SUMMARY

The Michigan Department of Agriculture and Rural Development (MDARD) Animal Industry Division (AID) is aware of the importance and supports the development of a functional, nationally accepted system for animal disease traceability. It is important to be able to accurately trace animals to their premises of origin and to do so in a quick, efficient, and cost effective manner. This is especially the case when dealing with contagious diseases that can spread very rapidly and affect multiple species of animals or has zoonotic potential.

Michigan has been on the cutting edge of use with Radio Frequency Identification Devices (RFID) in cattle as a result of Bovine Tuberculosis in the northeast portion of the Lower Peninsula and utilizing USAHerds and its functionality as a database for tracking cattle movement. AID understands there is room for improvement that could be undertaken to improve Animal Disease Traceability (ADT) within the State under the current system and is exploring:

- Implementing the use of Hewlett Packard's TRIM records management software as identified by our State's record keeping department and information technology department;
- Improvements within the new update to USAHerds and livestock markets that would aid in the traceability of intrastate and interstate movement of cattle and identifying any additional portals or hardware that could be developed, purchased and utilized to improve traceability with these enhancements;
- Development and incorporation of portals for more accurate transfer of data for USAHerds and HP TRIM from third party market vendors of electronic Interstate Certificates of Veterinary Inspection (ICVI). These vendors would include Global Vet Links, etc.;
- Development of an electronic large animal ICVI to share with Michigan veterinarians and develop a plan to promote and encourage its usage (along with other third party electronic ICVIs) within the State;
- Incorporation of hardware and software at the market level to enhance traceability. Examples of this may include (and is not limited to) updating and enhancing current RFID scanning equipment and communication lines to enhance the capturing and transfer of data more effectively within the market software and transfer of information to the State;
- Improve implementation of software and hardware with field staff to capture ADT market information and custom slaughter facilities;
- Incorporation of USAHerds and adapt it for use with the privately owned cervid (POC) facilities that are licensed within the state. This would aid in quickly tracking animal inventories of the POCs and monitoring ICVIs. Eventually swine, poultry, and remaining livestock species will be incorporated into the database;
- Standardization of enforcement procedures and development of consistent standard operating procedures for ICVI monitoring across all animal health programs;
- Identification and development of effective ways to measure the success of ADT within the State;
- Enhancement of enforcement for violation of ADT standards within the State;

- Supplementation of personnel within the ADT and enforcement programs will be necessary with the increased workload this will place on staff already working in these units. Additional personnel hours will be required and additional hiring of personnel (temporary or permanent) will be needed to make an effective program and
- Due to the International border with Canada and the amount of international trade with this country from owners of premises in both countries, continue to monitor number of livestock exchanged over the border and begin to study any discrepancies for movement based on current law.

Additionally, effective communication material and projects will be required to reach all stakeholders affected by changes from an ADT program will be developed for successful implementation. To accomplish this, Michigan will further advance our ADT program by developing outreach activities to educate Michigan veterinarians, livestock producers, fairs and exhibitions, markets, haulers, and slaughter facilities on the importance of ICVIs and key animal information necessary to have an effective ADT program. In addition, we will work with the veterinary community to encourage the use of electronic ICVIs with the goal of having 20% of the practitioners using electronic ICVIs for export in the next five years. Exploration of other technologies for tracking animal movement will be considered as technology continues to advance in this area.

The following timeline is currently being considered:

- FY2014—Identify personnel software, and hardware needs within and without the current existing ADT system and create a timeline to purchase identified material and implement personnel or program changes to create or manage an effective realistic traceability program based on what can be accomplished within State means. Continue creating educational material and outreach projects for all stakeholders affected by changes within the ADT programs. Complete undergoing study within markets determining how to better capture information from Michigan markets and begin/complete development of state market tracking database. Outline project timeline for looking at Michigan custom slaughter facilities in regards to ADT. Begin/continue study of international number of animals crossing Canadian border and identify needs for ADT program.

- FY2015—Reassess where State is within timelines developed from projects listed in 2014. Continue to make enhancements within database systems. Continue educational and outreach programs. Complete database forms for markets and implement use of forms for collection of data at markets. Monitor data as it comes in and adjust programs as needed. Complete international movement project. Begin timeline for needs as identified in project.

- FY2016—Reassess where State is within ADT timelines developed from original projects in 2014. Identify any changes needed within the original plan and continue with plan as needed. Continue with educational and outreach programs. Continue to monitor data and modify programs to meet ADT needs.

CURRENT TRACEABILITY SITUATION

Who are we?

The Michigan Department of Agriculture and Rural Development (MDARD) Animal Industry Division (AID) is responsible for animal traceability as authorized under Act 466 of 1988, the ANIMAL INDUSTRY ACT.

In Michigan, there is a close working relationship between AID and the United States Department of Agriculture Animal and Plant Health Inspection Service Veterinary Services Michigan Area Office. The two agencies share resources and duties for animal health programs.

External partners of the AID for animal disease traceability are:

- Michigan Allied Poultry Industries (MAPI)
- Michigan Beef Industry Commission (MBIC)
- Michigan Cattlemen's Association (MCA)
- Michigan Department of Attorney General
- Michigan Department of Natural Resources
- Michigan Department of Transportation (MDOT)
- Michigan Farm Bureau (MFB)
- Michigan Horse Council
- Michigan Milk Producer's Association (MMPA)
- Michigan Pork Producer's Association (MPPA)
- Michigan Sheep Breeder's Association (MSBA)
- Michigan State Police (MSP)
- Michigan State University (MSU), College of Agriculture and Natural Resources (CANR)
- Michigan State University (MSU), College of Veterinary Medicine (CVM)
- Michigan State University (MSU), Diagnostic Center for Population and Animal Health (DCPAH)
- Michigan State University-Extension (MSU-E)
- Michigan Veterinary Medical Association (MVMA)
- National Institute for Animal Agriculture (NIAA)
- United Deer Farmers of Michigan (UDFM)
- United States Animal Health Association (USAHA)
- United States Department of Agriculture (USDA), Animal and Plant Heath Inspection Services (APHIS), Veterinary Services (VS)
- United States Department of Agriculture (USDA), Animal and Plant Heath Inspection Services (APHIS), Wildlife Services (WS)

Where are we now?

The strength of Michigan's current ADT program is that the cattle industry has been working with the State to eradicate bovine tuberculosis infection since the fall of 1994 when the disease reemerged. There are various requirements for ADT in place for other livestock species in Michigan and these are mainly enforced through ICVIs.

General

Emphasis is placed on checking all ICVIs and Owner Shipper Statements (OSS) for animals coming into Michigan for accuracy. The ICVIs are then forwarded and filed appropriately. If inaccuracies are discovered, the state in which the issuing veterinarian wrote the ICVI is notified to address issue(s) with hope of preventing future failure in completing ICVIs. Enforcement of standard operating procedures have been developed for chronic offenses. All ICVIs are filed by species and retained per state retention policies. Michigan is receiving electronic ICVIs from private companies (e.g., Global Vet Links). These electronic ICVIs are being filed and stored for three years. AID has a staff person designated to deal with ICVIs as part of their duties.

MDARD staff receives requests from local law enforcement or Michigan State Police from time to time to track livestock found along roads or in non-residential areas. Staff searches for the animal identification in USAHerds or one of the other animal identification tracking systems that AID uses. When using USAHerds for cattle this entire process usually takes less than an hour to complete.

Occasionally, staff are involved in investigations of stolen cattle. If electronic identification is known - the tag numbers are placed on the "Watch List" in USAHerds and if they show up at a livestock market or slaughter facility further investigation can be conducted.

This assistance and information is available Monday through Friday, except on holidays. MDARD has a hot line that can be accessed 24/7 and if necessary, information could be made available at any time.

AID has created and presented several lunch time webinars for veterinarians and their office staff discussing ADT and on YouTube and with FoodShield.

Cattle

Michigan adopted the Federal 9 CFR Parts 71, 77, 78, et al., *Traceability for Livestock Moving Interstate; Final Rule* on March 13, 2013. An educational period was set by the State Veterinarian that would continue through January 1, 2014 (this deadline was extended through December 2014 due to a TB response in 2013), and enforcement would begin January 2015.

Michigan is using electronic identification in all cattle moved intrastate off any premises and has mandatory usage in the MAZ and MAAZ for Bovine Tuberculosis testing. On January 9, 2006, the Michigan Commission of Agriculture adopted policy mandating radio frequency identification (RFID) of

cattle leaving a premises in Michigan. The commission charged MDARD with developing an implementation plan and set the mandate to begin March 1, 2007. The mandate was implemented at this time and is still enforced. MDARD worked with external stakeholders and developed a RFID working group in 2013 that looked at developing agreements under the parameters set within the *Final Rule* with external stakeholders in interested states.

Metal tags that are USDA official identification are distributed through AID to accredited veterinarians. A database is maintained to track accredited veterinarian information and tag series distributed. Accredited veterinarians are required to maintain a list of where tags have been placed in animals.

Michigan has two (2) USDA approved livestock markets and 14 state inspected livestock markets. Thirteen (13) markets are equipped with stationary RFID readers and two (2) livestock markets are equipped with portable hand held readers for scanning RFID tags. Weekly sales reports from the livestock markets are received in the MDARD office and compared to the number of cattle actually scanned. These numbers are also compared to previous year data for the same time frame. In addition, the livestock markets submit a tag sale report (RFID tag sales) monthly to MDARD for entry into USAHerds. This report includes the producer's address and cattle type information for the animals selling that day.

Livestock markets are monitored for movement violations. Regulatory staff visits the northern markets on a weekly basis and the southern markets are visited at least once monthly. Failure to use RFID tags in cattle is reported to the Lansing office.

There are five large slaughter plants in three states equipped with stationary Electronic Identification Readers (EIDs) which receive a majority of Michigan cattle weekly. There is a mid-size slaughter plant in Michigan equipped with a portable reader. Both livestock and slaughter facilities with stationary readers are monitored daily for reader performance and functionality. Data from these facilities are recorded and maintained in our USAHerds database. In addition, Michigan has a total of 130 FSIS – inspected and custom slaughter plants. The majority of these plants are small and family operated. MDARD and USDA field staff collects RFID tags from these facilities, scans, and loads them into USAHerds database to confirm end movement of cattle.

To address Michigan's unique challenge to manage and monitor the presence of Bovine Tuberculosis within selected areas of the State's cattle herds, AID installed the USAHerds database application on January 4, 2010. The new browser-based application incorporates an Electronic Identification program that will enable MDARD and USDA to capture and coordinate key demographic data associated with each animal, including relocations of each animal, primarily from Mobile Information Management (MIM) input from regulatory and private veterinarians. The movement of all cattle within the Modified Accredited Zone (MAZ) will be traceable and available from birth to final disposition – including relocations of each animal to other premises both within Michigan or to markets outside of Michigan. This program is critical for the state. Without this tracking

and verification, no Michigan-based cattle would be able to be sold outside of Michigan.

Michigan uses Mobile Information Management (MIM) technology for gathering animal data and identification (ID). Animal records includes RFID, USDA metal tags, management ID, tattoos, breed registration numbers, as well as age, breed and sex. The data is submitted to the MIM Repository in Fort Collins via the MIM Manager application and from there is uploaded to the General Data Base (GDB), USAHerds, and the AINM databases. The data is collected and submitted during Bovine Tuberculosis (TB) testing (annual tests, movement tests, accreditation testing) by MDARD and USDA staff along with approximately 27 Veterinary Clinics using the MIM application. Data from hand-written test charts is being entered by USDA staff utilizing the MIM application and is also being uploaded electronically to the GDB, USAHerds and AINM database. MDARD and USDA encourages the use of MIM to decrease the risk of human error in transposing numbers, to reduce the numbers of hours needed by State and Federal staff to hand enter the data into the system and to submit the data to the various databases. MDARD as well as USDA staff have access to the USAHerds database on a 24/7 basis. Within the MAZ, the tracing of a particular animal's movement, premises location and TB testing history can be achieved within minutes. MDARD is developing a web-based application for producers in the MAZ to allow them to obtain movement permits 24/7. The same movement rules used by MDARD staff will be required for producers obtaining movement permits for intrastate movement outside normal business hours. Also, the USAHerds database is used for the annual Herd Reconciliation of every herd in the MAZ.

USAHerds database is used for cattle traceability which includes, and is not limited to:
- Producer animal inventory, movement certificates;
- TB test results;
- Wildlife Risk Mitigation Project assessments, action plans and verifications;
- Herd plan inspections;
- Freezer beef inspections; and
- Other special reports.

In 2011, MDARD's TB Program implemented the use of a secondary identification to be used on all cattle in the MAZ when the animals are tested and/or moved off of a MAZ premises to any other premises to enhance animal traceability from this area of the state. This is also part of Michigan's current Memorandum of Understanding (MOU) with the USDA as it relates to Bovine Tuberculosis.

Sheep/Goat
In Michigan, a scrapie tag is mandatory for movement of goats or sheep from any premises. Livestock markets are monitored for movement violations and if found, are reported to the office. Violations are followed up by the AID Compliance Unit. The Michigan Area Office for USDA/APHIS/Veterinary Services maintains a database of scrapie tags that is used to trace animals to the farm of

origin when a disease investigation is being conducted. These tags are tied to a unique premises identifier which is maintained in the USAHerds database.

Cervids

All privately owned cervid facilities are required to be licensed in the State of Michigan. Two forms of identification, at least one official, are required on cervids on all facilities except ranch operations by the time the cervids are 12-months of age. This means any cervids allowed to move intrastate in Michigan are required to have official identification. Both metal and RFID tags are tracked in a spreadsheet by AID with premises information and list of tags distributed. The RFID tags go directly to the producer and metal tags are sent to accredited veterinarians. Accredited veterinarians are responsible for tracking to whom they have given these tags. Additionally, each privately owned cervid (POC) operation has a unique premises identifier maintained in USAHerds.

Equine

Michigan does not track individual identification (e.g., microchip number) on horses in a database. Either group identification numbers or descriptive information is collected on ICVIs. Some horses are identified by tattoo number or by implanted microchip numbers.

Poultry

Michigan is not tracking individual identification on poultry in a database. Either group identification from VS 9-3 forms (or industry variations of this form) are used to track large poultry movements or ICVIs that are received by the office from exporting states. Poultry movement is followed as allowed in the *Final Rule*. Occasional individual bird band numbers are received on ICVIs.

Swine

While not mandatory, most commercial swine operations have premises identification numbers that are entered in USAHerds. There are identification requirements for both feeder pigs and breeding swine entering and moving within Michigan with exceptions for swine going direct to slaughter and swine herds with official commuter herd plans or as written in USDA memos concerning swine identification.

Strengths and Weaknesses

The strengths of AID Animal Disease Traceability program are based on an Administration that supports the program, mandatory individual identification for some species, and use of technology to track animal movement. Michigan's current Governor is supportive of agriculture and the use of technology to advance agribusiness. This mindset is seen in both MDARD and AID Administrations. Michigan requires that all cattle, cervids, goats, and sheep leaving a premises must have unique official identification. Furthermore, all cattle producers are mandated to use RFID since March 2007. In January 2010, AID implemented the USAHerds database to track animal identification and movement of cattle in the bovine tuberculosis program. This database also

includes a unique premises identifier for all known livestock premises in Michigan. Additionally, there are human resources on staff to maintain functionality and troubleshoot USAHerds. Also, AID has a staff person who oversees import/export of animals in Michigan to ensure movement requirements are being met and ICVIs are properly filled out by accredited veterinarians.

Weaknesses on Michigan's animal traceability program revolve around human, financial resources, paper filing systems, and employee turnover impairs our ability to effectively manage and coordinate an animal traceability program. Some of these positions may not be backfilled due to a lack of economic resources. Also, with regards to technological enhancements (e.g., tablet PCs at livestock markets and software purchases or enhancements to existing systems) - these enhancements require a substantial amount of financial support. Cost-benefit analyses are conducted for all enhancements to determine how best to utilize the limited funds. Michigan also has a strong international trade with Canada and there are a few premises operated in Ontario, Canada that are owned by Michigan residents.

VISION AND MISSION CONTEXT FOR ADVANCING TRACEABILITY

Vision Statement

Public health, animal health and well-being, and animal industries are safeguarded through collaborative efforts and implementation of effective programs.

Mission Statement

Protect, Regulate, and Promote Animal Health.

TRACEABILITY REQUIREMENTS

Strategic goal(s)

Michigan is determined to continue to enhance our State-wide infrastructure for advancing animal disease traceability for all species and to be compatible with USDA standards as set forth in the *Traceability for Livestock Moving Interstate; Final Rule* and species specific USDA memos on traceability.

Programmatic goals

1. Enhance capacity of current database functionality, HP TRIM, and USAHerds, to efficiently track interstate animal movement for all species.
2. Expand upon the implemention of HP TRIM and see if it can be adapted to create a complete animal identification number tracing system
3. Develop and implement an outreach program on animal traceability pertaining to proper animal identification and quality completion of ICVIs, OSS, or other methods developed in agreements.
4. Develop and implement a standardized veterinary compliance program for repeat offenders of ICVI with USDA APHIS VS, Michigan office.

5. Update the current state website with species specific requirements consistent with the *Final Rule*.
6. Explore opportunities to utilize technology for enhancing animal traceability and implement when financially feasible.
7. Maintain and enhance, when and where feasible, processes for monitoring ICVI quality.

Animal disease traceability performance measures

1. Quarterly measure the number of ICVIs created in Michigan by species.
2. Quarterly measure the number of ICVIs received in Michigan by species.
3. Quarterly measure the number of animals, by species, on ICVIs created in Michigan.
4. Quarterly measure the number of animals, by species, on ICVIs received in Michigan.
5. Quarterly measure the number of USDA official identification issued to Michigan livestock producers by species.
6. Quarterly measure the number of correction letters sent regarding data quality for importation requirements on ICVIs.
7. Complete and report export/import quarterly exercise traces on ICVIs using the Traceability Performance Measures and
8. Annually measure the percentage of livestock premises that are registered in our database using USDA National Agriculture Statistic Services census data for the denominator.
9. Quarterly measure the percentage of electronic ICVIs received vs. paper ICVIs received.
10. Quarterly measure the number of animals scanned at Michigan livestock markets.
11. Quarterly measure the number of field staff meetings that involve ADT training.
12. Quarterly measure the number of reader maintenance visits at the Michigan livestock markets.
13. Quarterly measure the number of new premises registered in USAHerds.

Metrics were gathered in 2012 and 2013. The metrics gathered in 2013 are considered the baseline for 2014 as the measures that were collected were more reliable than the 2012 metrics as personnel learned the system. MDARD will continue to collect this information as required by the cooperative agreement and evaluate the data to make additional improvements.

Data requirements

Michigan acquires data from several sources that aid our animal traceability program; ICVIs, surveillance testing, and tag distribution systems.

ICVIs for movement into Michigan are individually monitored to ensure completeness. Critical information includes, but is not limited to, addresses for

both where the animal(s) came from and where animal(s) went, animal identification, descriptive information, and necessary test results for the specie of interest.

Michigan utilizes a software application called USAHerds to manage our bovine tuberculosis eradication program data, such as surveillance results and individual animal electronic identification information. The database communicates with National Premises Allocator to obtain a unique identifier for each premises. In addition, USAHerds ties electronic identification sold by tag distributors to cattle premises in Michigan. Cattle Electronic identification sold at livestock markets is hand entered into USAHerds database.

Electronic identification used in Michigan's Cervid Program is tracked via **spreadsheets, which includes premises** information and list of tags shipped to producer are all correlated and tracked by MDARD's Animal Industry Division.

USDA approved metal tags are used in Michigan. These tags are distributed to veterinary clinics on an as needed basis for use in cattle and cervids.
The Department keeps track of what tags are sent to accredited veterinarians, and it is their responsibility to track where the tags are used.

In Michigan, scrapie tags are distributed through the USDA APHIS Veterinary Services Area Office and it is there that a database is maintained of the tags that have been distributed to various sheep and goat producers.

Bovine Tuberculosis test charts that are handwritten for cattle and/or cervids are hand entered into the appropriate database which allows for the traceability of such animals.

In the event that a State/Tribe would request information on animal(s) that may have originated from Michigan, our databases would be searched to determine if identification can be found and traced to the herd/flock of origin.

Information technology plan

Information technology (IT) will be critical to fully implement the State-wide infrastructure for our animal traceability program. Enhancements both within HP TRIM and USAHerds will be needed to create a successful program. Additional IT may be required at markets to create an effective ADT system. This may include purchase of tablets to accurately capture information from markets or custom slaughter facilities, or to enhance RFID scanning capabilities.

Michigan is currently receiving electronic ICVIs from private and public (USDA) vendors. We will continue to receive these documents and encourage accredited veterinarians to utilize electronic ICVIs via computer or app programs. Michigan is also involved in beta testing with private companies on ICVIs being utilized by phone apps.

As opportunities for advancement of Michigan's IT portion of the animal traceability program are identified, they will be fully explored and implemented when and where possible. Examples may be, but are not limited to, electronic identification for sheep and pigs, and livestock markets' ability to correlate backtags with electronic identification; purchase of hardware to help field staff capture accurate data, etc.

Resource requirements

Key impediments to having a successful animal traceability program are financial resources and maximizing the use of the limited funds. This is true for both the acquisition of personnel with technical expertise and the ability to purchase/enhance software packages. As Michigan moves forward with implementing an animal traceability program there will be a need for resources and we will address the needs one step at a time.

Organizational needs

In 2007, Michigan implemented mandatory electronic identification of cattle. Successful implementation was due in part to the support of industry and our administration. This support for animal traceability continues today at all levels in Michigan. To fully implement a State-wide infrastructure for animal traceability will require additional financial resources. As we demonstrate value and identify opportunities - we will make further advancements with the program.

Outreach

Successful implementation of an animal traceability program requires education of stakeholders. Informed stakeholders will assist in advancement of animal traceability and therefore play a key role in the program. Outreach may include and is not limited to the following:

Accredited veterinarians

In conjunction with the Assistant District Director and State Animal Health Official, outreach activities will be developed to educate accredited veterinarians on the importance of correctly completing ICVIs and what is approved "official" animal identification. Outreach activities that will be implemented, but not limited to:

- Development of presentations/videos on how to successfully fill out an ICVI.
- Development of presentations/videos on use of electronic ICVIs.
- Development of presentations/videos on proper animal identification.
- Development of presentations/videos on the importance of animal traceability program.
- Present or have displays at local and state veterinary meetings.
- Development of presentations/videos on how to use IT for improved efficiencies.

Livestock markets

Livestock markets have played a key role in implementing mandatory electronic identification. Currently all livestock markets have the ability to scan electronic identification. They will continue to be key players for further enhancements of Michigan's animal traceability program. Outreach activities that will be implemented, but not limited to:

- Development of presentations/videos on proper animal identification.
- Development of presentations/videos on the importance of animal traceability program.
- Development of presentations/videos on how to use IT for improved efficiencies.

Industry as a whole

The cattle industry was pivotal in implementing electronic identification in Michigan. In addition sheep, goats, and cervids must also bear an USDA official identification when leaving premises. Other livestock industries are in support of what is being done in Michigan. As an animal traceability program is implemented a number of outreach activities will be implemented, but are not limited to:

- Development of presentations/videos on proper animal identification;
- Development of presentations/videos on the importance of animal traceability program;
- Development of presentations/videos on how to use IT for improved efficiencies;
- Development of presentations/videos on importance of ICVIs;
- Present or have displays at local and state industry meetings;

Monitoring and reporting interstate movement activity

Monitoring of animal disease traceability performance measures is dictated within the annual agreements. Modifications in reporting requirements are made on an annual basis based upon USDA requirements.

TRACEABILITY IMPLEMENTATION

Ranking of priorities for implementation

FY2014
1. Capture and track data from ICVIs.
2. Explore options to enhance USAHerds for ICVIs and other animal programs.
3. Maintain and improve market animal scanning capabilities.
4. Complete outreach material scheduled for 2014.
5. Conduct scheduled outreach activities.
6. Begin scanning paper ICVIs and incorporating images into HP TRIM database.
7. Implement standard operating procedures for monitoring ICVIs and consistent enforcement policy.
8. Market and personnel enhancements with additional hardware as needed.

FY2015
1. Capture and track data from ICVI.s
2. Incorporate cervid program into USAHerds.
3. Emphasize to accredited veterinarians the use of electronic ICVIs with a goal of having 20% of ICVIs be electronically generated by FY2019.
4. Schedule and conduct outreach and educational activities.
5. Explore new opportunities for enhancing animal traceability.
6. Market and personnel enhancements with additional hardware as needed.

FY2016
1. Capture and track ICVIs.
2. Emphasize to accredited veterinarians the use of electronic ICVIs with a goal of having 20% of ICVIs be electronically generated by FY2015.
3. Schedule and conduct outreach activities.
4. Explore new opportunities for enhancing animal traceability.
5. Market and personnel enhancements with additional hardware as needed.